10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CADM1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10703a

Specification

CADM1 Antibody (N-term) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	Q9BY67
Other Accession	Q8R5M8, NP_001091987.1
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**48509**
Antigen Region	**66-94**

CADM1 Antibody (N-term) - Additional Information

Gene ID 23705

Other Names
Cell adhesion molecule 1, Immunoglobulin superfamily member 4, IgSF4, Nectin-like protein 2, NECL-2, Spermatogenic immunoglobulin superfamily, SgIgSF, Synaptic cell adhesion molecule, SynCAM, Tumor suppressor in lung cancer 1, TSLC-1, CADM1 (HGNC:5951)

Target/Specificity
This CADM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 66-94 amino acids from the N-terminal region of human CADM1.

Dilution
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CADM1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CADM1 Antibody (N-term) - Protein Information

Name CADM1 (HGNC:5951)

Function Mediates homophilic cell-cell adhesion in a Ca(2+)- independent manner (PubMed:22438059, PubMed:12050160). Also mediates heterophilic cell-cell adhesion with CADM3 and NECTIN3 in a Ca(2+)- independent manner (By similarity). Interaction with CRTAM promotes natural killer (NK) cell cytotoxicity and interferon-gamma (IFN-gamma) secretion by CD8+ cells in vitro as well as NK cell-mediated rejection of tumors expressing CADM1 in vivo (PubMed:15811952). In mast cells, may mediate attachment to and promote communication with nerves (PubMed:15905536). CADM1, together with MITF, is essential for development and survival of mast cells in vivo (PubMed:22438059). By interacting with CRTAM and thus promoting the adhesion between CD8+ T- cells and CD8+ dendritic cells, regulates the retention of activated CD8+ T-cell within the draining lymph node (By similarity). Required for the intestinal retention of intraepithelial CD4+ CD8+ T-cells and, to a lesser extent, intraepithelial and lamina propria CD8+ T-cells and CD4+ T-cells (By similarity). Interaction with CRTAM promotes the adhesion to gut-associated CD103+ dendritic cells, which may facilitate the expression of gut-homing and adhesion molecules on T-cells and the conversion of CD4+ T-cells into CD4+ CD8+ T-cells (By similarity). Acts as a synaptic cell adhesion molecule and plays a role in the formation of dendritic spines and in synapse assembly (By similarity). May be involved in neuronal migration, axon growth, pathfinding, and fasciculation on the axons of differentiating neurons (By similarity). May play diverse roles in the spermatogenesis including in the adhesion of spermatocytes and spermatids to Sertoli cells and for their normal differentiation into mature spermatozoa (By similarity). Acts as a tumor suppressor in non-small-cell lung cancer (NSCLC) cells (PubMed:11279526, PubMed:12234973). May contribute to the less invasive phenotypes of lepidic growth tumor cells (PubMed:12920246).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Synapse {ECO:0000250|UniProtKB:Q8R5M8} Note=Localized to the basolateral plasma membrane of epithelial cells in gall bladder. {ECO:0000250|UniProtKB:Q8R5M8}

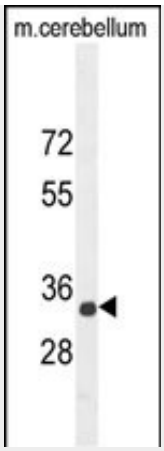
CADM1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

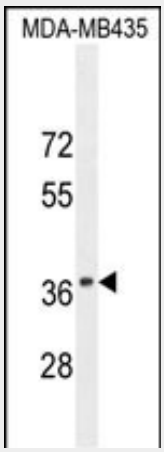
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CADM1 Antibody (N-term) - Images

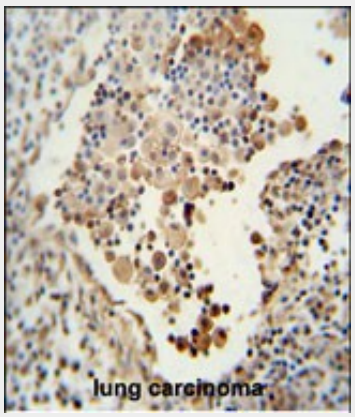
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CADM1 Antibody (N-term) (Cat. #AP10703a) western blot analysis in mouse cerebellum tissue lysates (35ug/lane).This demonstrates the CADM1 antibody detected the CADM1 protein (arrow).



CADM1 Antibody (N-term) (Cat. #AP10703a) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the CADM1 antibody detected the CADM1 protein (arrow).



CADM1 antibody (N-term) (Cat. #AP10703a) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the CADM1 antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

CADM1 Antibody (N-term) - Background

Mediates homophilic cell-cell adhesion in a Ca(2+)-independent manner. Also mediates heterophilic cell-cell adhesion with CADM3 and PVRL3 in a Ca(2+)-independent manner. Acts as a

tumor suppressor in non-small-cell lung cancer (NSCLC) cells. Interaction with CRTAM promotes natural killer (NK) cell cytotoxicity and interferon-gamma (IFN-gamma) secretion by CD8+ cells in vitro as well as NK cell-mediated rejection of tumors expressing CADM3 in vivo. May contribute to the less invasive phenotypes of lepidic growth tumor cells. In mast cells, may mediate attachment to and promote communication with nerves. CADM1, together with MITF, is essential for development and survival of mast cells in vivo. May act as a synaptic cell adhesion molecule that drives synapse assembly. May be involved in neuronal migration, axon growth, pathfinding, and fasciculation on the axons of differentiating neurons. May play diverse roles in the spermatogenesis including in the adhesion of spermatocytes and spermatids to Sertoli cells and for their normal differentiation into mature spermatozoa.

CADM1 Antibody (N-term) - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
McGovern, D.P., et al. Hum. Mol. Genet. 19(17):3468-3476(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
You, Y., et al. Melanoma Res. 20(3):179-183(2010)